IN THE CLAIMS

Please amend the claims as indicated by the revision status and revisions marks:

1. (CURRENTLY AMENDED) A method of controlling a subscriber loop interface circuit (SLIC) DC feed with hysteresis, comprising:

a) switching from a normal mode DC feed to a modified mode DC feed when $V_M \leq V_{THRESH1}$, wherein a DC feed defined by metallic voltage (V_M) and loop current is transitioned from a first point on a first characteristic curve associated with the normal mode to a first point on a second characteristic curve associated with the modified mode; and

b) switching from the modified mode to the normal mode when $V_M \geq V_{THRESH2}$, wherein the DC feed is transitioned from a second point on the second characteristic curve to a second point on the first characteristic curve, wherein the first and second points of each of the first and second characteristic curves are all distinct, wherein the first point of the first characteristic curve and the second point of the second characteristic curve have distinct loop currents.

~~A method of controlling a DC feed from a subscriber loop interface circuit (SLIC), comprising the steps of:~~

~~switching from a normal mode DC feed following a first characteristic curve to a modified mode DC feed following a second characteristic curve when $V_M \leq V_{THRESH1}$, wherein V_M is a subscriber loop voltage; and~~

~~switching from the modified mode to the normal mode when $V_M \geq V_{THRESH2}$, wherein $V_{THRESH1} < V_{THRESH2}$, wherein the switching from the normal mode to the modified mode and the switching from the modified mode to the normal mode occur at distinct loop currents.~~

2. (ORIGINAL) The method of claim 1 wherein the first characteristic curve is linear, wherein the first characteristic curve is defined by an open circuit voltage, V_{OC}, and a slope corresponding to a pre-determined impedance.

3. (ORIGINAL) The method of claim 1 wherein the first characteristic curve is linear, wherein the second characteristic curve is defined by a target open circuit voltage, V_{OC_TARGET}, and a slope corresponding to a pre-determined impedance.

4. (ORIGINAL) The method of claim 1 wherein the first and second characteristic curves are linear, wherein the first characteristic curve is defined by an open circuit voltage, V_{OC}, and a pre-determined slope, wherein the second characteristic curve is defined by a target open circuit voltage, V_{OC_TARGET}, and the same pre-determined slope corresponding to a pre-determined impedance.

5. (ORIGINAL) The method of claim 4 wherein the pre-determined impedance is approximately 320Ω.

6. (CURRENTLY AMENDED) A subscriber loop interface circuit apparatus comprising:

control circuitry for controlling a subscriber loop DC feed with hysteresis; and

a plurality of programmable registers storing values defining a first characteristic curve and a second characteristic curve, wherein the control circuitry switches from a normal mode DC feed following ~~a~~ the first characteristic curve to a modified mode DC feed following ~~a~~ the second characteristic curve when $V_M \leq V_{THRESH1}$, wherein V_M is a ~~subscriber loop~~ metallic voltage, wherein the control circuitry switches from the modified mode to the normal mode when $V_M \geq V_{THRESH2}$, wherein $V_{THRESH1} < V_{THRESH2}$, wherein the switching from the normal mode ~~to the modified mode~~ and the switching from the modified mode ~~to the normal mode~~ occur at distinct loop currents.

7. (ORIGINAL) The apparatus of claim 6 further comprising a digital signal processor.

8. (ORIGINAL) The apparatus of claim 6, wherein one of the plurality of programmable registers stores an open circuit voltage value, wherein the open circuit voltage value in conjunction with a pre-determined slope defines a linear first characteristic curve.

9. (PREVIOUSLY PRESENTED) The apparatus of claim 6, wherein one of the plurality of programmable registers stores a value enabling computation of a target open circuit voltage value, wherein the target open circuit voltage value in conjunction with a pre-determined slope defines a linear second characteristic curve.

10. (PREVIOUSLY PRESENTED) The apparatus of claim 9 wherein the plurality of registers stores an open circuit voltage value (V_{OC}), a first relative threshold (V_{THL}), a second relative threshold (V_{THH}), and a relative target open circuit voltage (V_{OC_DELTA}), wherein $V_{THRESH1}=V_{OC}+V_{THL}$, $V_{THRESH2}=V_{OC}+V_{THH}$, and the target open circuit voltage = $V_{OC}+V_{OC\_DELTA}$.

11. (ORIGINAL) The apparatus of claim 6 wherein the first and second characteristic curves are linear, wherein the first characteristic curve is defined by an open circuit voltage, V_{OC}, and a pre-determined slope, wherein the second characteristic curve is defined by a target open circuit voltage, V_{OC_TARGET}, and the same pre-determined slope corresponding to a pre-determined impedance.

12. (ORIGINAL) The apparatus of claim 11 wherein the pre-determined impedance is approximately 320Ω.

13. (CURRENTLY AMENDED) A method of controlling a DC feed from a subscriber loop interface circuit (SLIC), comprising the steps of:

switching from a normal mode DC feed following a first characteristic curve to a modified mode DC feed following a second characteristic curve when $I_L \geq I_{THL}$, wherein I_L is a subscriber loop current; and

switching from the modified mode to the normal mode when $I_L \leq I_{THH}$, wherein I_{THH} and I_{THL} are distinct, wherein switching between modes occurs with hysteresis such that for each characteristic curve the switched-to DC feed point is substantially distinct from the switched-from DC feed point on the same characteristic curve.

14. (PREVIOUSLY PRESENTED) The method of claim 13 wherein the first characteristic curve is linear, wherein the first characteristic curve is defined by an open circuit voltage, V_{OC}, and a slope corresponding to a pre-determined impedance.

15. (PREVIOUSLY PRESENTED) The method of claim 14 wherein the pre-determined impedance is approximately 320Ω.

16. (PREVIOUSLY PRESENTED) The method of claim 13 wherein the first characteristic curve is linear, wherein the second characteristic curve is defined by a target open circuit voltage, V_{OC_TARGET}, and a slope corresponding to a pre-determined impedance.